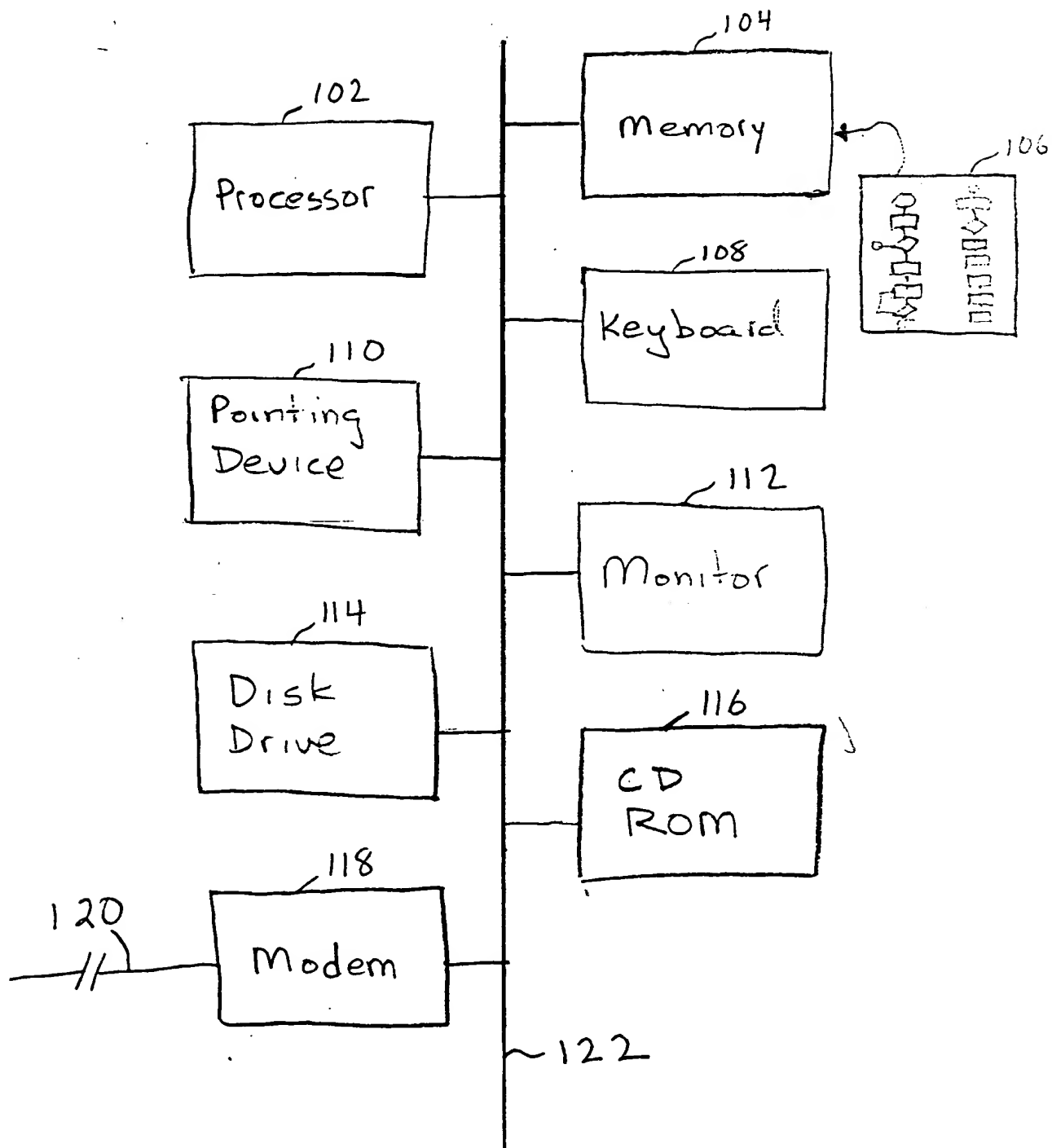


FIG. 1



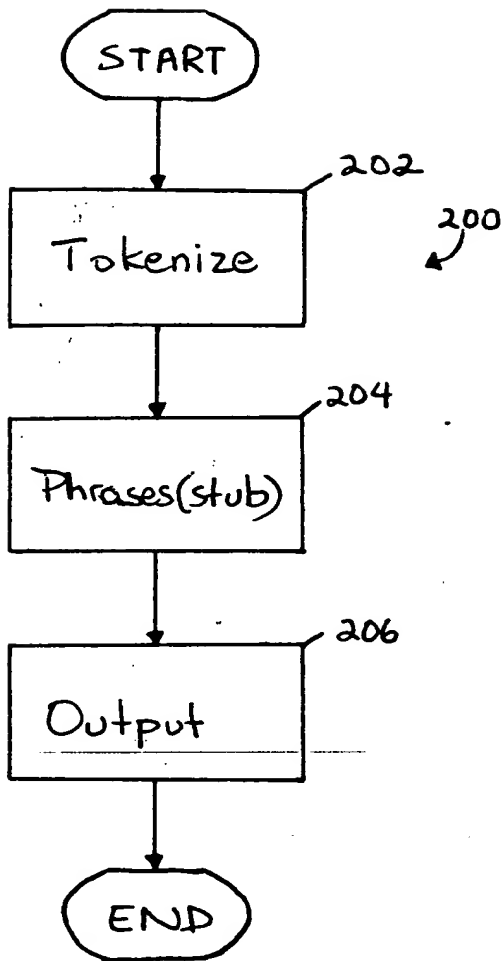


FIG. 2

tokenize
 phrases (stub)
 phone
 output

FIG. 6

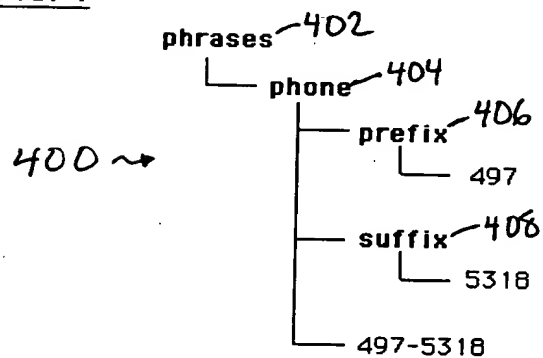
ROOT

Home
 \:
 \ # space
 \(
 949
 \)
 \ # space
 497
 \-
 5318

300

FIG. 3

FIG. 4



ROOT

Home
 \:
 \ # space
 \(
 949
 \)
 \ # space
 _phone
 _prefix
 497
 \-
 _suffix
 5318

FIG. 7

FIG. 5

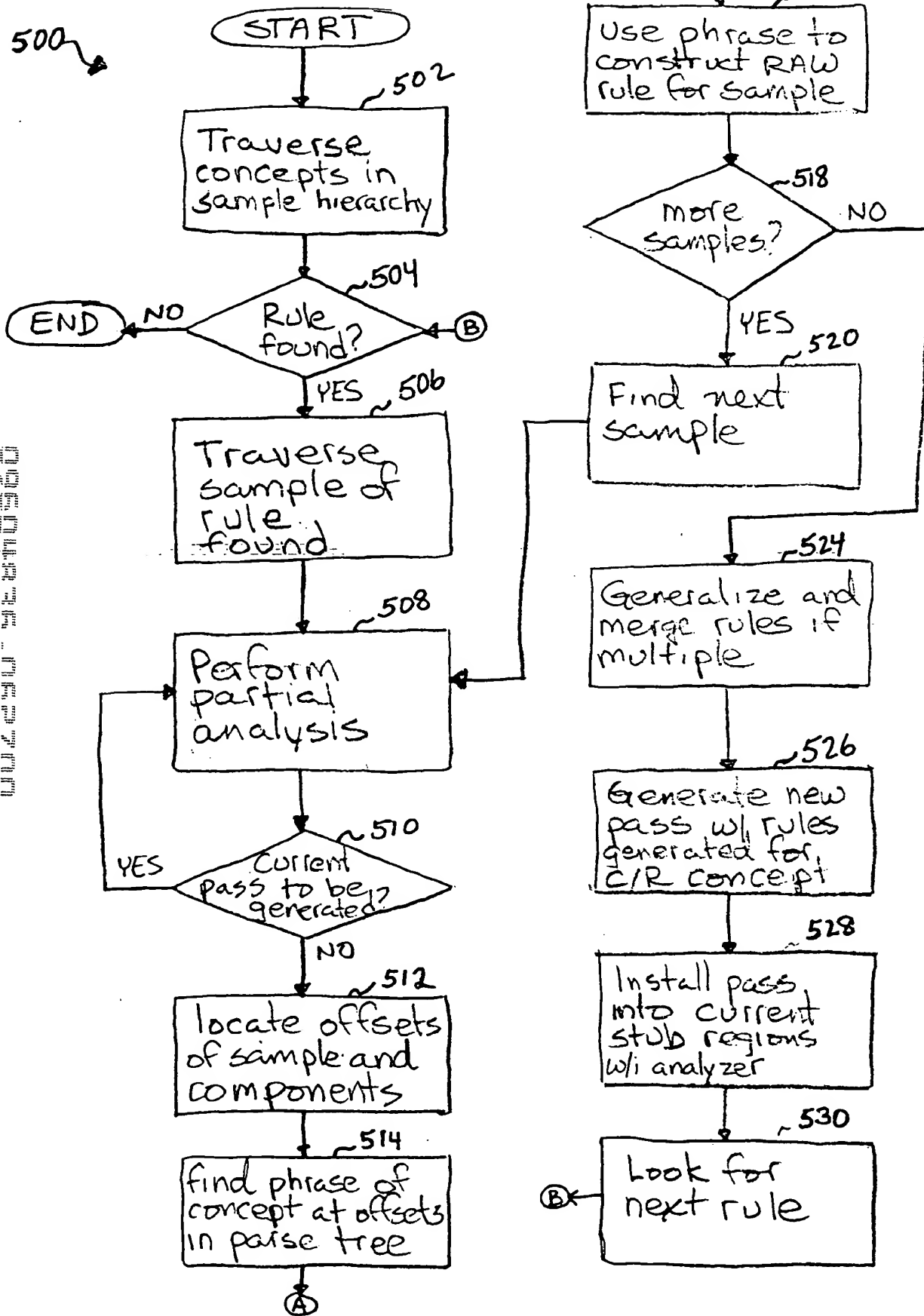
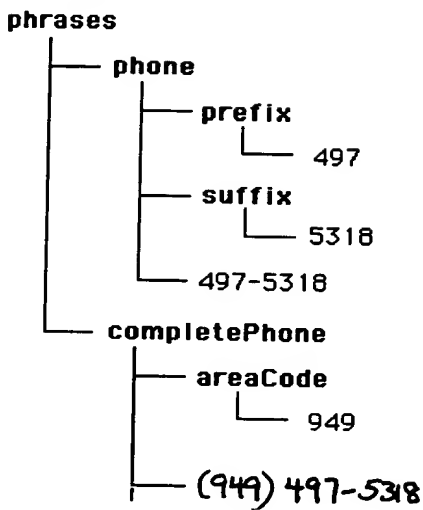


FIG. 8



tokenize
phrases (stub)
phone
completePhone
output

FIG. 9

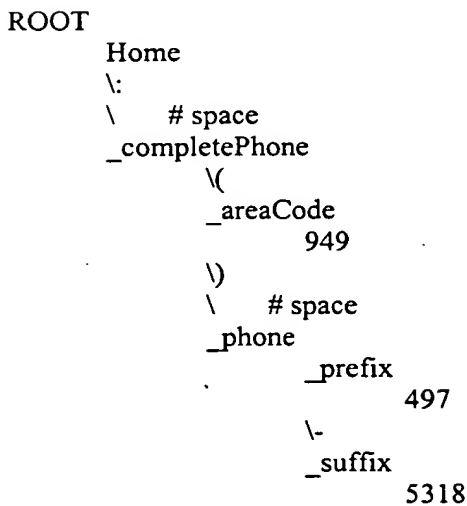


FIG. 10

FIG. 11B

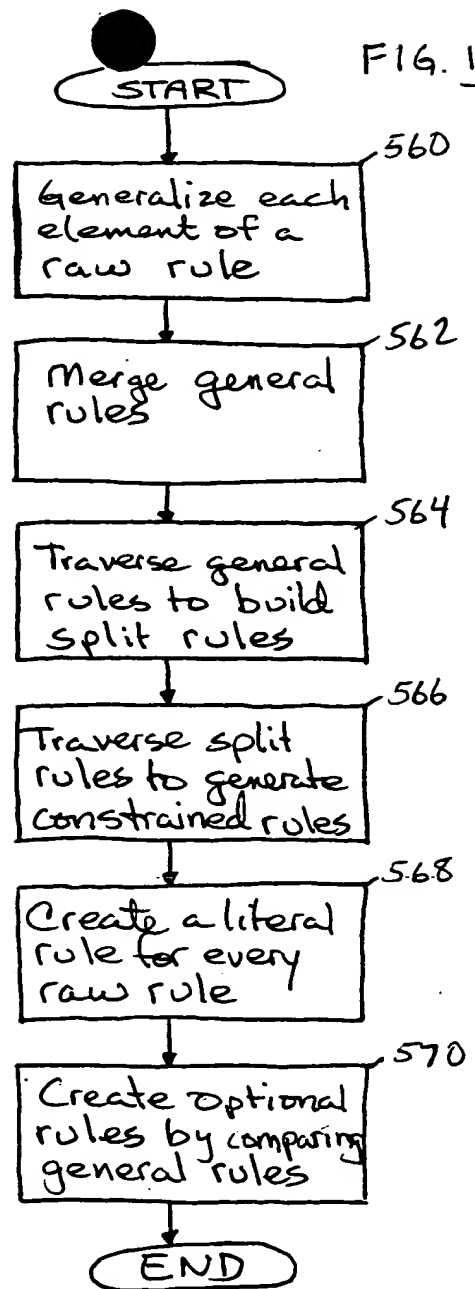
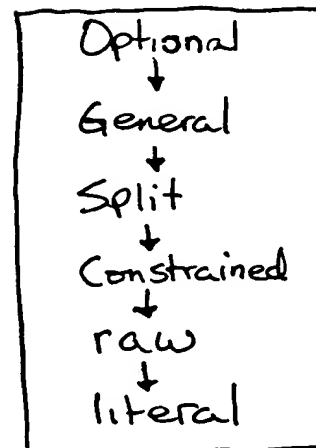


FIG. 11A



604

606

cityStateZip
cityState
phoneExtension
phoneNumber
countryCode
areaCode
prefix
suffix

- (+1) 510 614 6220
- (+1) 321 357 8740
- 1-408-341-0877
- 1-555-379-2296
- (540) 433 - 9045
- (415) 929 - 7305
- 818-491-2148
- 987-654-3210
- 949.497.5318
- 222.111.3333
- 206 566-5471
- 123 456-7890
- 510 357 8740
- 333 333 4444
- (123) 456 7890
- (234) 567 8901
- 949-497-5318

phonePhrases
unitRoom
addressLine

Gram Ana Text

phoneNumber.pat (pass 1)

```

\ - [s]
_xdNUM [s layer=(_suffix)]
@@

@PRE
<2,2> length(3)
<5,5> length(3)
<9,9> length(4)
@RULES

# Ex: (+15)\_929\_-\_7305
_phoneNumber <-
  _xWILD [min=1 max=1 s match=(_openPunct \ ())]
  _xdNUM [s layer=(_areaCode)]
  _xWILD [min=1 max=1 s match=(_closePunct \ )]]
  _xWHITE [star s]
  _xdNUM [s layer=(_prefix)]
  _xWHITE [star s]
  \ - [s]
  _xWHITE [star s]
  _xdNUM [s layer=(_suffix)]
  @@

@PRE
<1,1> length(3)
<3,3> length(3)
<5,5> length(4)
@RULES

```

602

600

608

FIG. 12

dehilster.txt

Home: (562) 437-2211
Work: (562) 491-2148
535 Magnolia Dr. Apt. #102
Long Beach, CA 90802-6648
david@dehilster.com
http://www.dehilster.com

Education

1985 M.S, Linguistics, Ohio State University
1983 BS, Mathematics, Mino

Projects

1998-present Senior Software Engineer at Text Analysis Inter
1996-98 Senior Software Engineer at I-Search, Los Angeles, C

Forward
Backward
Display Tree
Form
View Output

cityStateZip
cityName
stateName
zipCode
zipSuffix
country

Out Gram Ana Text

FIG. 13

LiteralPhrase

- HeaderPhrase
- Others
- Caps
- Word
- Phrase
- Contact
 - humanName
 - cityStateZip
 - cityName
 - stateName
 - zipCode
 - zipSuffix
 - country
 - Long Beach, CA 90802-6648
 - cityState
 - phoneExtension
 - phoneNumber

Out Gram Ana Text

dehilster.txt

Home: (562) 437-2211
 Work: (562) 491-2148
 535 Magnolia Dr. Apt. #102
Long Beach, CA 90802-6648
 david@dehilster.com
 http://www.dehilster.com

Forward
 Backward
 Display Tree
 Form
 View Output

Education

1985 M.S, Linguistics, Ohio
 1983 BS, Mathematics, Minor

Projects

1998-present Senior Software Engineer at Text Analysis
 1996-98 Senior Software Engineer at I-Search, Los Angeles

cityStateZip
 cityName
 stateName
 zipCode
 zipSuffix
 country

FIG. 14

cityStateZip

Home: (562) 437-2211
 Work: (562) 491-2148
 535 Magnolia Dr. Apt. #
Long Beach, CA 90802-66
 david@dehilster.com
 http://www.dehilster.co

Long Beach, CA 90802-6648

Drag Tear Join Move 1

cityName Long Beach
 stateName CA
 zipCode 90802
 zipSuffix 6648
 country

Education

1985 M.S, Linguistics,
 1983 BS, Mathematics, M

Projects

1998-present Senior Sof
 1996-98 Senior Software
 1993-96 Senior Engineer
 1990-93 Senior Engineer
 for TexUS (Text Underst

cityStateZip
 cityName
 stateName
 zipCode
 zipSuffix
 country

Revert OK Cancel

FIG. 15

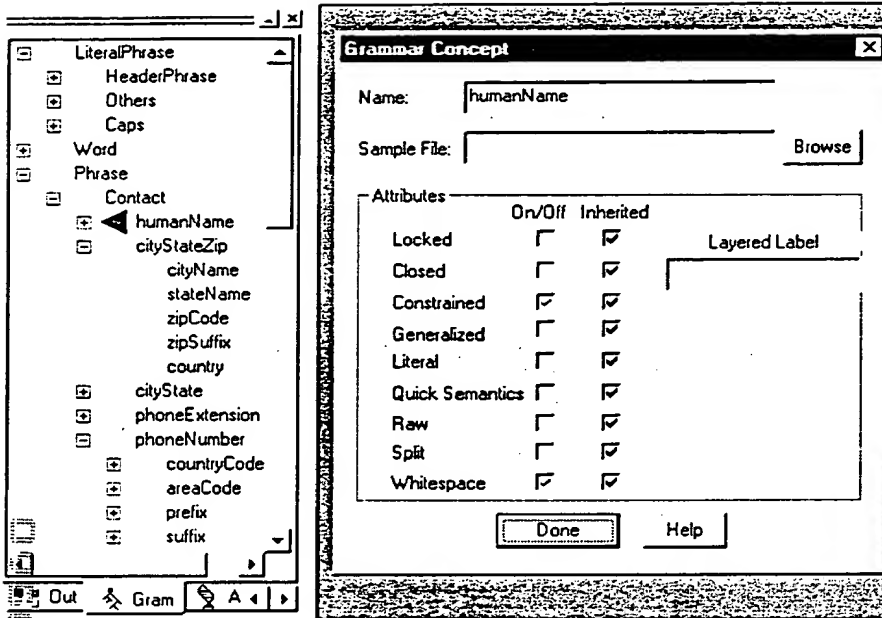


FIG. 16

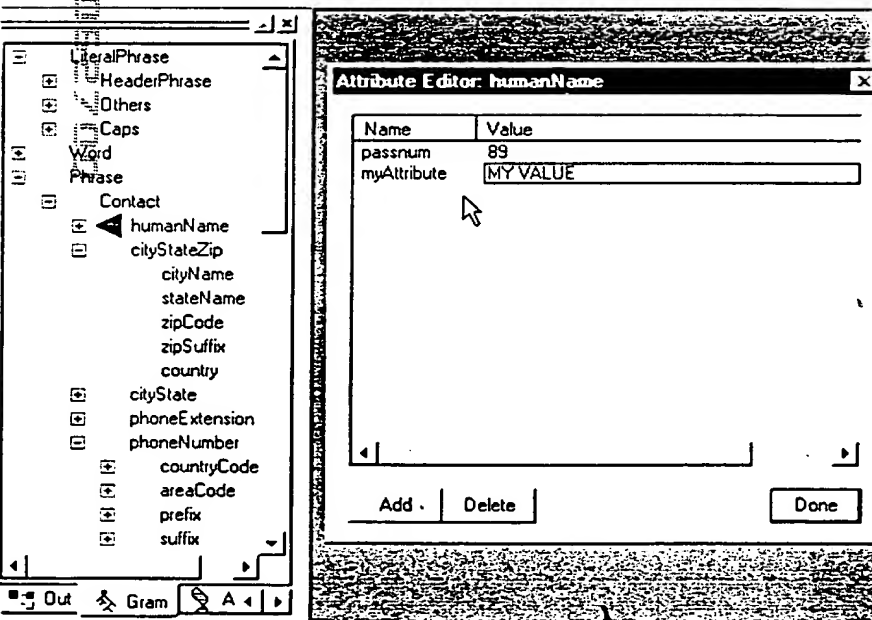


FIG. 17

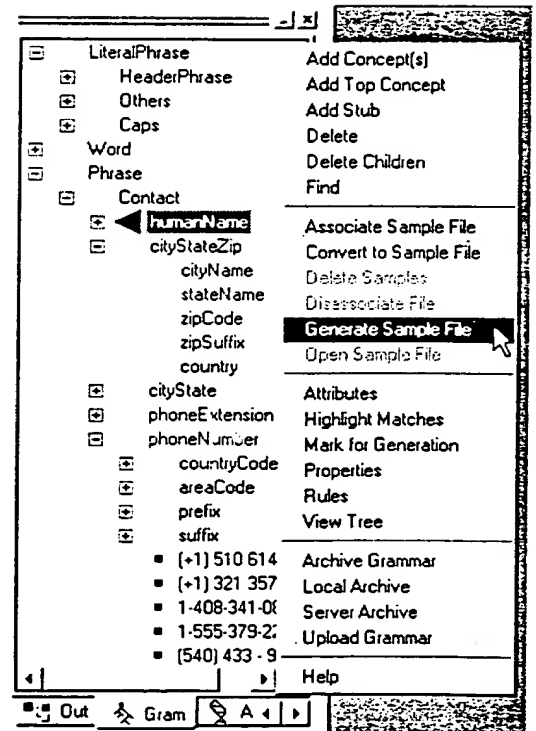
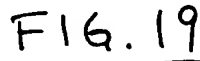


FIG. 18

592

[illegible]